

REMARKS

Claims 1-30 are presently pending. Claims 2, 6, 1, 20, and 27-29 are canceled by the present amendment. The remaining claims stand rejected or objected to. Accordingly, claims 1, 3-5, 7-10, 12-19, 21-26, and 30 are at issue.

The drawings stand objected to under 37 C.F.R. §1.83 (a). Regarding “inverse filtering,” Applicants respectfully traverse the objection. The drawings show the claimed features to the extent that they are subject to illustration. For example, the drawings show a “prefilter” Block-4.2 (Fig. 6). The prefilter incorporates the inverse filter. App., p. 14. The characteristics of the inverse filter may be defined, for example, as the inverse amplitude characteristics of the amplitude characteristics illustrated in Fig. 3. The design of the inverse filter is then described in detail on pages 15-19 of the application, including mathematical equations. No further illustrations are believed necessary.

Regarding the comments concerning the features of claim 8, new Fig. 9 is respectfully submitted. New Fig. 9 is a flow chart of the process described at page 18 of the application. No new material is added.

Regarding the comments concerning the features of claim 15, Fig. 3 illustrates the ambient conditions of the telephone channel and $H(\omega)$. No further illustrations are believed necessary.

Claims 22, 23, and 26 stand objected to because of the recitation of the phrases “medium filter” or “medium filtering.” The claims inadvertently included a clerical error. The word “medium” should have been written as “median”. See e.g., App., pp. 20-21. Claims 22, 23, and 26 are amended to correct this clerical error. No change in claims scope is intended by the amendment.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Nakajima et al., U.S. Patent No. 4,283,601. However, claim 6, which depends from claim 2, which in turn depends from claim 1, has been determined to be allowable over the cited patents. Claim 1 has been amended to recite the substance of allowable claim 6 and intervening claim 2. Accordingly, claim 1, as presently amended, is not anticipated by Nakajima and is believed to be in condition for allowance.

Claim 8 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Mirfakhraei, U.S. Patent No. 6,512,789. However, claim 11, which depends from claim 8, has been determined to recite patentable subject matter. Claim 8 has been amended to recite the subject matter of claim 11. Accordingly, claim 8 as amended is not anticipated by Mirfakhraei, and is believed to be in condition for allowance.

Claims 17-19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Russell, U.S. Patent No. 5,353,310. Dependent claim 20, however, has been determined to recite patentable subject matter. Claim 17 has been amended to recite the subject matter of claim 20. Accordingly, claim 17, as presently amended, is not anticipated by Russell, and is believed to recite allowable subject matter. Also, all presently rejected claims which depend from claim 17 must also recite allowable subject matter for the same reason.

Claims 2, 3, and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima, U.S. Patent No. 4,283,601, in view of Jacobs, U.S. Patent No. 5,956,683. Claim 2 is canceled by the present amendment, and its subject matter is recited as part of claim 1. Claim 3 has been amended to depend from claim 1, instead of canceled claim 2. Because independent claim 1 has been amended to recite allowable subject matter,

claim 3 must also be in condition for allowance. Claim 27 is canceled by the present amendment.

Claims 4 and 5 stand rejected as being unpatentable over Nakajima in view of Jacobs and Mirfakhraei. These claims depend from claim 1, which has been amended to recite allowable subject matter previously recited in claim 6. Accordingly, claims 4-5, which depend from claim 1, are not obvious in view of Nakajima combined with Jacobs.

Claims 28-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Jacobs and Nishigushi. Claims 28 and 29 are canceled by the present amendment. Claim 30 is amended to recite additional function for the parameter preprocessor means. These functions have been found to recite allowable subject matter in the context of method of claim 20. Accordingly, claim 30, as presently amended, is believed to be allowable over the cited patents.

Applicants have attempted to address each ground for rejection or objection, and it is believed that the application is in condition for allowance. If the examiner finds that there are any outstanding issues which may be resolved by a telephone interview, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,

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